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## **CLAIMS**

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- 1. An audio system comprising an audio signal generating means for output of an audio signal, and a remote control device for control of the audio signal generating means, the audio signal generating means having means arranged for including an identification signal within the audio output and serving to identify the audio signal generating means from which the audio signal is output, the remote control device being arranged to receive the identification signal and to identify the audio signal generating means from which the audio signal is output.
- 2. An audio system as claimed in Claim 1, wherein the identification signal included within the output audio signal is arranged to be inaudible.
- 15 3. An audio system as claimed in Claim 1 or 2, wherein the output audio signal is modulated with the identification signal.
  - 4. An audio system as claimed in Claim 1, 2 or 3, wherein the identification signal comprises a pseudo random noise signal.

- 5. An audio system as claimed in any one or more of the preceding claims, and including means arranged to determine the distance between the audio signal generating means and the remote control device.
- 25 6. An audio system as claimed in Claim 5, wherein the means for determining the said distance is responsive to a timed receipt of the identification signal.
- 7. An audio system as claimed in Claim 6, wherein the remote control device is arranged to generate a timing reference signal and transmit the same to the audio signal generating means.

- 8. An audio system as claimed in Claim 6, wherein the audio signal generating means is arranged to produce the timing reference signal and to transmit an indication of that to the remote control unit.
- 9. An audio system as claimed in Claim 5, 6, 7 and 8, wherein the said distance between the audio signal generating means and the remote control device is determined on the basis of the timed receipt of the audio output signal from the audio signal generating means at the remote control device.
- 10. An audio system as claimed in any one or more of the proceeding claims, wherein the remote control unit is arranged to transmit a controlling signal to the audio signal generating means serving to control the volume of the output audio signal in a manner responsive to a change in distance of the remote control device from the audio signal generating means.

- 11. An audio system as claimed in Claim 10, wherein the change in distance is determined on the basis of a change in magnitude of an audio signal as received at the remote control device.
- 20 12. An audio system as claimed in any one or more of the preceding claims and including means arranged for determining the position of the remote control device relative to the audio signal generating means and on the basis of the identification signal received at the remote control device.
- 25 13. An audio system as claimed in Claim 12, wherein the audio signal generating means is arranged to provide a plurality of output channels, wherein a different identification signal is associated with the audio signal output from each channel.
- 30 14. An audio system as claimed in Claim 13, wherein the remote control device is arranged to transmit a signal to the audio signal generating means serving to vary the output from at least one of the said channels in response to

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the determined position of the remote control device relative to the audio signal generating device.

- 15. An audio system as claimed in Claim 13, wherein the remote control device is arranged to transmit a signal to audio signal generating means serving to vary the output from at least one of the said channels in response to a change in position of the remote control device relative to the audio signal generating device.
- 16. An audio system as claimed in Claim 15, and including a plurality of audio signal generating means arranged to be located in a spaced relationship and including means for the hand-over of audio signal output there-between responsive to a control signal from the remote control device, the remote control device being arranged to generate the control signal responsive to determination of the change in location of the remote control device relative to the said plurality of audio signal generating means.
  - 17. An audio system as claimed in any one or more of the preceding claims wherein the audio signal generating means is arranged such that the identification signal is included within the output audio signal and with a relatively high carrier frequency.
  - 18. An audio system as claimed in Claim 17 wherein the carrier frequency comprises at least a low ultrasound frequency.

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19. A method of controlling audio signal generating means arranged for the output of an audio signal and including the steps of including an identification signal within the audio output and which serves to identify the audio signal generating means from which the output is generated, and receiving, at a remote control device arranged for control of the audio signal generating means, the identification signal and processing the same so as to identify the means from which the audio signal was output so as to allow for delivery of a

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control signal from the remote control device to the identified audio signal generating means.

- 20. A method as claimed in Claim 19, wherein the identification signal included within the output audio signal is arranged to inaudible.
  - 21. A method as claimed in Claim 20 or 21, wherein the output audio signal is modulated with the identification signal.
- 10 22. A method as claimed in Claim 19, 20 or 21, wherein the identification signal comprises a pseudo random noise signal.
- 23. A method as claimed in any one or more of Claims 19-22, and including the step of determining the distance between the audio signal generating
  15 means and the remote control device.
  - 24. A method as claimed in any one or more of Claims 19-23, wherein the remote control unit is arranged to transmit a controlling signal to the audio signal generating means serving to control the volume of the output audio signal in a manner responsive to a change in the distance of the remote control device from the audio signal generating means.

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- 25. A method as claimed in Claim 24, wherein the change in distance is determined on the basis of a change in magnitude of an audio signal as received at the remote control device.
  - 26. A method as claimed in any one or more of Claims 19-25, and including the step of determining the position of the remote control device relative to the audio signal generating means and on the basis of the identification signal received at the remote control device.

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- 27. An audio signal generating means for output of an audio signal and having means for including an identification signal with the output audio signal and serving to identify the audio signal generating device.
- 5 28. An audio signal generating means as defined in Claim 27 and arranged for use in an audio system as claimed in any one or more of Claims 2-18.
  - 29. A remote control device for controlling an audio signal output from audio signal generating means, the remote control device being arranged to receive and process an identification signal from the audio signal generating means and so as to identify the audio signal generating means from which an audio signal is output.
- 30. A remote control device for controlling an audio signal output for audiosignal generating means and arranged for use in an audio system as claimed in any one or more of Claims 1-19.
  - 31. An audio system substantially as hereinbefore described with reference, and as illustrated in, the accompanying drawing.